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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☐ Claim(s) _____ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1.   This Office Action is in response to the Amendment filed on 10/15/2008.

2.   In the instant Amendment, Claims 3 and 26 were cancelled; Claims 1, 4, 6, 11, 14-15, 18-
24, 27-29, 34, 37-38, 41-44, 46-47, and 49 have been amended; Claims 1, 24, and 47 are
independent claims. Claims 1-2, 4-25, and 27-50 have been examined and are pending.
This Action is made FINAL.

Response to Arguments

3.   **Double Patenting**:

The Terminal Disclaimer submitted on 10/15/2008 was received. In the mean time
awaiting official review, the Examiner maintains the Double Patenting rejection for the
record of prosecution.

4.   **Claim Objections:**

The objections of the claims 11 and 14 are withdrawn as the claims have been amended.

5.   **Claim Rejections - 35 U.S.C. § 101:**

The rejections of claims 24-46 under 35 U.S.C. § 101 are withdrawn as the claims have
been amended.

The rejections of claims 27, 29-30, 32-36, and 42-50 under 35 U.S.C. § 101 are maintained
as the amended claims are directed to non-statutory subject matter. Applicants' arguments
with respect to the statutory subject matter of the aforementioned claims have been
considered but they are not persuasive.

Applicants' arguments:

> *"The Applicant has amended independent claim 47 to recite means for transmitting*
>
> *credential-related data to the mobile node and the home agent. This is shown in FIG.*
>
> *8, items 53-55. Therefore, the withdrawal of the § 101 rejection is respectfully*
>
> *request."*

The Examiner disagrees due to the following reasons:

As described in Fig. 8 and paragraph 0032, item 53 is a security association module,

item 54 is an authorization information manager, and item 55 is an input-output (I/O)

interface. There is no further disclosure in the specification as to how the

aforementioned modules are implemented and what the structures of the

aforementioned modules are. It appears reasonable that the aforementioned modules

may be implemented by software by one of ordinary skill in the art. As a result, the

claimed invention is directed to non-statutory subject matter.

6.   **Claim Rejections - 35 U.S.C. § 112, second paragraph:**

The rejections of claims 24-46 under 35 U.S.C. § 112, second paragraph, are withdrawn as

the claims have been amended.

The rejections of claims 27, 29-30, 32-36, and 42-50 under 35 U.S.C. § 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention. Applicants' arguments with

respect to the *"means for"* structures of the aforementioned claims have been considered

but they are not persuasive.

Applicants' arguments:

> *"The means for assigning is item 52 in FIG. 8. The means for transmitting is item 55 in*
>
> *FIG. 8. Therefore, the withdrawal of the § 112 rejection is respectfully requested;"*

The Examiner disagrees due to the following reasons:

> Similar to section 6), as described in Fig. 8 and paragraph 0032, *"the module 52 is*
>
> *operable for assigning and/or re-assigning a suitable home agent,"* and item 55 is an
>
> input-output (I/O) interface. There is no further disclosure in the specification as to
>
> how the aforementioned modules are implemented and what structures of the
>
> aforementioned modules are. Therefore, the nature of the subject matter claimed may
>
> reasonably be construed as a mental process since the claim language broadly
>
> encompasses non-tangible embodiments.

7. **Claim Rejections - 35 U.S.C. § 102(a) and 35 U.S.C. § 103(a):**

Applicants' arguments in the instant Amendment, filed on 10/15/2008, have been fully

considered but they are not persuasive.

Applicants' arguments:

> *"Faccin does not disclose or suggest a method or system that sends MIPv6-related*
>
> *authentication and authorization information in an authentication protocol in an end-*
>
> *to-end procedure from a mobile node operating in a visited network to an AAA server*
>
> *in a home network of the mobile node, wherein the intervening AAA network nodes*
>
> *forward the MIPv6-related authentication and authorization information unchanged*
>
> *between the mobile node and the home AAA server."*

The Examiner disagrees for the following reasons:

Faccin discloses sends MIPv6-related authentication and authorization information in an authentication protocol in an end-to-end procedure *(pages 1-4, sections 1-3; in order to give access to a mobile node to network resources, the   mobile node needs to be authenticated and authorized; besides supporting mobile node authentication and authorization, the AAA infrastructure can also be used for distributing the security keys needed to support the mobile node roaming; pages 2-3, sections 3.1 and 3.2; page 5, section 4.1; pages 11-18, sections 7.1-7.3 and 7.6; pages 19-28, sections 9.1-9.2 and 9.5)* from a mobile node operating in a visited network *(pages 2-4, section 3; mobile node mn@xyz.com is operating in a visited domain abc.com)* to an AAA server in a home network of the mobile node *(pages 2-4, section 3, AAAH server is located in the home domain xyz.com)*, wherein the intervening AAA network nodes forward the MIPv6-related authentication and authorization information unchanged between the mobile node and the home AAA server *(pages 10-16, section 7; pages 19-28, section 9; information flows 1.2-1.9 and 2.2-2.11; the AAAv verifies the message is coming from a valid AAA Client and then, checks the MIPv6 Feature Vector AVP, and then sends it to the MN's home AAA server; the AAAh may exchange many messages with the MN via the AAAv (e.g. for a user authentication mechanism that requires more than one round-trip); AAAh may also compute other keying material according to the keys requested by the MN and send it to the MN passing through the AAAv).*

Claim Objections

8.   The amendment filed 10/15/2008 is objected to under 35 U.S.C. 132(a) because it

introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall

introduce new matter into the disclosure of the invention. The added material which is not

supported by the original disclosure is as follows: Claims 1 and 24 recite the limitations

*"**intervening AAA network nodes**"* and *"**the MIPv6-related authentication and**

authorization information unchanged between the mobile node and the home AAA

server"* (emphasis added). However, the *"intervening AAA network"* is not defined in the

specification and *"the MIPv6-related authentication and authorization information

unchanged between the mobile node and the home AAA server"* is not discussed in the

specification.

The Examiner respectfully requests the Applicant to point out where in the

specification support can be found for the aforementioned newly added limitations.

Applicant is required to cancel the new matter in the reply to this Office Action.

Double Patenting

9.   The nonstatutory double patenting rejection is based on a judicially created doctrine

grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified

or improper timewise extension of the "right to exclude" granted by a patent and to prevent

possible harassment by multiple assignees. A nonstatutory obviousness-type double

patenting rejection is appropriate where the conflicting claims are not identical, but at least

one examined application claim is not patentably distinct from the reference claim(s)

because the examined application claim is either anticipated by, or would have been obvious

over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed.

Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*,

759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ

761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re*

Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d)

may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent either is shown to be

commonly owned with this application, or claims an invention made as a result of activities

undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a

terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with

37 CFR 3.73(b).

Claims 1, 8, 12-13, 24, 31, and 35-36 are provisionally rejected on the ground of

nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 8,

and 10-11 of copending Application No. 10/595,014. Although the conflicting claims are

not identical, they are not patentably distinct from each other because Claims 1, 8, 10, and

11 of Patent Application No. 10/595,014 contain(s) every element of claim(s) 1, 8, 12-13,

24, 31, and 35-36 of the instant application and as such anticipate(s) claim(s) 1, 8, 12-13,

24, 31, and 35-36 of the instant application.

"A later patent claim is not patentably distinct from an earlier patent claim if the

later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at

896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because

the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d

at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type

double patenting where a patent application claim to a genus is anticipated by a patent claim

to a species within that genus). " ELI LILLY AND COMPANY v BARR

LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON

PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

This is a <u>provisional</u> obviousness-type double patenting rejection because the

conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

11. **Claims 27, 29-30, 32-36, and 42-50 rejected under 35 U.S.C. 101** because the claim may

be directed to non-statutory subject matter.

- **Regarding claims 27, 29-30, 32-36, and 42-46**; claims 27, 29-30, 32-36, and

42-46 are not directed to eligible subject matter in view of *In re Comiskey*, 499 F.3d 1365

(Fed. Cir. 2007). Claims 27, 29, 30, 32-33, 35-36, 42, and 45-46 recite the limitations

"means for transferring;" Claims 42-43 recite the limitations *"means for assigning;"* and

Claim 44 recites the limitations *"means for configuring."* The aforementioned *"means for"*
do not require integrating a machine (e.g., a computer), or constitute a process of
manufacture, or altering a composition of matter. There is no further disclosure in the
specification as to how the aforementioned *"means for"* are implemented. Therefore, the
nature of the subject matter claimed may reasonably be construed as a mental process since
the language of aforementioned claims broadly encompasses non-tangible embodiments.

- **Regarding claim 47**; the claim is not directed to eligible subject matter in view
of *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007). The claim recites *"means for
assigning," "means for distributing,"* and *"means for sending"* which do not require
integrating a machine (e.g., a computer), or constitute a process of manufacture, or altering
a composition of matter. There is no further disclosure in the specification as to how the
aforementioned *"means for"* are implemented. Therefore, the nature of the subject matter
claimed may reasonably be construed as a mental process since the language of claim 47
broadly encompasses non-tangible embodiments.

- **Regarding claims 48-50**; claims 48-50 are also directed to non-statutory subject
matter for the same reasons.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming
> the subject matter which the applicant regards as his invention.

13.   **Claims 27-30, 32-36, and 42-50 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

   •   **Regarding claims 27, 29-30, 32-36, and 42-46**; claims 27, 29-30, 32-36, and 42-46 are not directed to eligible subject matter in view of *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007). The claims recite *"means for transferring," "means for assigning,"* and *"means for configuring"* which do not require integrating a machine (e.g., a computer), or constitute a process of manufacture, or altering a composition of matter. There is no further disclosure in the specification as to how the aforementioned *"means for"* are implemented. Therefore, the nature of the subject matter claimed may reasonably be construed as a mental process since the claim language broadly encompasses non-tangible embodiments.

   •   **Regarding claim 47**; the claim is not directed to eligible subject matter in view of *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007). The claim recites *"means for assigning," "means for distributing,"* and *"means for sending"* which do not require integrating a machine (e.g., a computer), or constitute a process of manufacture, or altering a composition of matter. There is no further disclosure in the specification as to how the aforementioned *"means for"* are implemented. Therefore, the nature of the subject matter claimed may reasonably be construed as a mental process since the language of claim 47 broadly encompasses non-tangible embodiments.

- **Regarding claims 48-50**, claims 48-50 are also directed to non-statutory subject

matter for the same reasons.

Claim Rejections - 35 USC § 102

14.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in
> this or a foreign country, before the invention thereof by the applicant for a patent.

15.   **Claims 1-2, 4-10, 12-17, 19-25, 27-33, 35-40, and 42-50 are rejected under 35 U.S.C.**

102(a) as being anticipated by Faccin et al., (hereinafter "Faccin"), "Diameter Mobile IPv6

Application, draft-le-aaa-diameter-mobileipv6-6-03.txt," Internet Draft, XP015004098,

published in April 2003.

- **Regarding claim 1**, Faccin discloses a method of authentication and

authorization support for Mobile IP version 6 (MIPv6) *(pages 1-4, sections 1-3; pages 5*

and 11, sections 4.1 and 7.1), comprising:

        sending MIPv6-related authentication and authorization information in an

authentication protocol in an end-to-end procedure between a mobile node and a home

Authentication, Authorization and Accounting (AAA) server *(page 1, section 1; in order to*

give access to a mobile node to network resources, the   mobile node needs to be

authenticated and authorized; besides supporting mobile node authentication and

authorization, the AAA infrastructure can also be used for distributing the security keys

needed to support the mobile node roaming; pages 2-3, sections 3.1 and 3.2; page 5,

section 4.1; pages 11-18, sections 7.1-7.3 and 7.6; pages 19-28, sections 9.1-9.2 and 9.5), wherein the mobile node is operating in a visited network *(pages 2-4, section 3; mobile node mn@xyz.com is operating in a visited domain abc.com)* and the home AAA server is located in a home network of the mobile node *(pages 2-4, section 3, AAAH server is located in the home domain xyz.com)*; and

forwarding by intervening AAA network nodes *(pages 2-3, AAAv (AAA server in the visited network) is known as intervening AAA network node; page 14, section 7.5),* the MIPv6-related authentication and authorization information unchanged between the mobile node and the home AAA server *(pages 10-16, section 7; pages 19-28, section 9; information flows 1.2-1.9 and 2.2-2.11; the AAAv verifies the message is coming from a valid AAA Client and then, checks the MIPv6 Feature Vector AVP, and then sends it to the MN's home AAA server; the AAAh may exchange many messages with the MN via the AAAv (e.g. for a user authentication mechanism that requires more than one round-trip); AAAh may also compute other keying material according to the keys requested by the MN and send it to the MN passing through the AAAv).*

- **Regarding claim 2**, Faccin discloses the method of claim 1, wherein the authentication protocol is an extended authentication protocol *(page 2; pages 9-10, sections 6.1 and 6.2).*

- **Regarding claim 4**, Faccin discloses the method of claim 1, further comprising transferring the MIPv6-related information from the AAA server in the home network to a

home agent *(page 3; communication (4) exchanged from Home Agent and AAAh Server; page 11, section 7.2).*

- **Regarding claim 5**, Faccin discloses the method of claim 1, wherein the MIPv6-related information further comprises MIPv6 configuration information *(page 7, section 4.4; page 17, section 8).*

- **Regarding claim 6**, Faccin discloses the method of claim 4, wherein the MIPv6-related information is transferred over the AAA infrastructure for immediate or future establishment of a MIPv6 security association between the mobile node and the home agent *(page 5, section 4.2; page 12, section 7.3.1; page 18, section 8.2).*

- **Regarding claim 7**, Faccin discloses the method of claim 5, wherein the MIPv6-related information is transferred over the AAA infrastructure for establishing a binding for the mobile node in the home agent *(pages 5-6, sections 4.2-4.3).*

- **Regarding claim 8**, Faccin discloses the method of claim 2, wherein the extended authentication protocol is an extended Extensible Authentication Protocol (EAP) and the MIPv6-related authentication and authorization information is incorporated as additional data in the EAP protocol stack *(page 5, section 4.1; page 10, section 6.2; pages 22-24; sections 9.3-9.5).*

- **Regarding claim 9**, Faccin discloses the method of claim 8, wherein the MIPv6-related information is transferred in at least one EAP attribute in the EAP protocol stack *(page 5, section 4.1; page 10, section 6.2; pages 22-24; sections 9.3-9.5).*

- **Regarding claim 10**, Faccin discloses the method of claim 9, wherein the

MIPv6- related information is transferred as EAP attributes of the method layer in the EAP

protocol stack *(page 5, section 4.1; page 10, section 6.2; pages 22-24; sections 9.3-9.5).*

- **Regarding claim 12**, Faccin discloses the method of claim 9, wherein the

MIPv6- related information is transferred in a generic container attribute available for any

EAP method *(pages 9-10; sections 6.1-6.3; the IPv6 mobile node should be able to use

different authentication methods such as the different EAP types; the EAP data could be

sent as an extension to ICMPv6 messages, carried using the protocol defined by the PANA

EG or any other protocol).*

- **Regarding claim 13**, Faccin discloses the method of claim 9, wherein the

MIPv6- related information is transferred in a method-specific generic container attribute

of the method layer in the EAP protocol stack *(pages 9-10; sections 6.1-6.3; pages 14-15;

section 7.5-7.6).*

- **Regarding claim 14**, Faccin discloses the method of claim 1, wherein the

authentication protocol between the mobile node and an AAA client in the visited network

is carried by a protocol selected from the group of the Protocol for carrying Authentication

for Network Access (PANA), IEEE 802.1X, and Point-to- Point Protocol (PPP) *(page 5,

section 4.1; page 10, section 6.2; the EAP data could be sent as an extension to ICMPv6

messages, carried suing the protocol defined by the PANA WG or any other protocol).*

- **Regarding claim 15**, Faccin discloses the method of claim 1, wherein the authentication protocol is carried by an AAA framework protocol application between a AAA client in the visited network and the AAA server in the home network *(pages 3 and 13-16; sections 7.4 and 7.6)*.

- **Regarding claim 16**, Faccin discloses the method of claim 4, wherein the MIPv6- related information is transferred from the AAA server in the home network to the home agent in an AAA framework protocol application *(pages 3 and 15-16; sections 7.6 and 7.7)*.

- **Regarding claim 17**, Faccin discloses the method of claim 16, wherein the home agent is a local home agent in the visited network and the MIPv6-related information is transferred from the AAA home server to the local home agent via an AAA server in the visited network *(pages 3 and 5-6; sections 4.1-4.2)*.

- **Regarding claim 19**, Faccin discloses the method of claim 4, further comprising assigning, by the home AAA server, a home agent to the mobile node *(pages 26-27; section 9.5.2)*; and

distributing by the home AAA server to the mobile node and the home agent, credential-related data for establishing a security association between the mobile node and the home agent *(pages 24-28; sections 9.5.1-9.5.2 and 9.6)*.

- **Regarding claim 20**, Faccin discloses the method of claim 1, further comprising assigning a home address to the mobile node at the AAA home network server *(pages 26-27; section 9.5.2)*.

- **Regarding claim 21**, Faccin discloses the method of claim 20, further comprising configuring the home address of the mobile node using roundtrips of a selected EAP procedure *(pages 5-6, sections 4.1-4.2; page 15, section 7.6)*.

- **Regarding claim 22**, Faccin discloses the method of claim 19, further comprising

    building, at the mobile node, a home address for the mobile node using at least a portion of the address of its assigned home agent *(page 12, section 7.3.1; pages 15-16, section 7.6; page 20-21, section 9.2.1)*; and

    transferring the home address of the mobile node from the mobile node to the AAA home network server using around trip of a selected EAP procedure *(page 12, section 7.3.1; page 2-21, section 9.2.1)*.

- **Regarding claim 23**, Faccin discloses the method of claim 20, further comprising transferring the home address of the mobile node from the AAA home network server to a home agent using an AAA framework protocol application *(pages 24-27; section 9.5)*.

- **Regarding claim 24**, Faccin discloses a system for authentication and
authorization support for MIPv6 *(pages 1-4, sections 1-3; pages 5 and 11, sections 4.1 and
7.1)*, comprising:

    a mobile node operating in a visited network *(pages 2-4, section 3; mobile node
mn@xyz.com is operating in a visited domain abc.com)*;

    a home Authentication, Authorization and Accounting (AAA) server in a home,
network of the mobile node *(pages 2-4, section 3, AAAH server is located in the home
domain xyz.com)*; and

    intervening AAA network nodes *(pages 2-3, AAAv (AAA server in the visited
network) is known as intervening AAA network node; page 14, section 7.5)* for transferring,
between the mobile node and the home AAA serve, MIPv6-related authentication and
authorization information in an authentication protocol in an end-to-end procedure
transparent to the visited network *(pages 2-3, section 3; pages 10-16, section 7;
information flow 1.2-1.9; pages 19-28, section 9; information flow 2.2-2.11)*;

    wherein the intervening AAA network nodes pass the MIPv6-related
authentication and authorization information unchanged between the mobile node and the
home AAA server *(pages 10-16, section 7; pages 19-28, section 9; information flows 1.2-
1.9 and 2.2-2.11; the AAAv verifies the message is coming from a valid AAA Client and
then, checks the MIPv6 Feature Vector AVP, and then sends it to the MN's home AAA
server; the AAAh may exchange many messages with the MN via the AAAv (e.g. for a user
authentication mechanism that requires more than one round-trip); AAAh may also*

compute other keying material according to the keys requested by the MN and send it to the

MN passing through the AAAv).

- **Regarding claim 25**, claim 25 is similar in scope to claim 2, and is therefore rejected under similar rationale.

- **Regarding claims 27-33**, claims 27-33 are similar in scope to claims 4-10, respectively, and are therefore rejected under similar rationale.

- **Regarding claims 35-40**, claims 35-40 are similar in scope to claims 12-17, respectively, and are therefore rejected under similar rationale.

- **Regarding claims 42-46**, claims 42-46 are similar in scope to claims 19-23, respectively, and are therefore rejected under similar rationale.

Regarding claim 47, Faccin discloses an Authentication, Authorization and Accounting (AAA) home network server for authentication and authorization support for Mobile IP version 6(MIPv6) *(pages 1-4, sections 1-3; pages 5 and 11, sections 4.1 and 7.1)*, comprising:

means for assigning a home agent to a mobile node *(pages 5-6, section 4.2; page 17, section 8.1; pages 26-27; section 9.5.2)*;

means for transmitting to the mobile node and the home agent, credential-related data for establishing a security association between the mobile node and the home agent *(pages 20-27, section 9.2.1-9.2.2, and 9.3-9.5)*; and

means for sending and receiving MIPv6-related authentication and authorization

information between the AAA home network server and the mobile node in the visited

network in an end-to-end procedure *(pages 2-4, section 3; pages 11-18, sections 7.1-7.3*

and 7.6; pages 19-28, sections 9.1-9.2 and 9.5; pages 10-16, section 7; pages 19-28,

section 9; information flows 1.2-1.9 and 2.2-2.11 allow a mobile node mn@xyz.com

operating in a visited domain abc.com to perform authentication with the AAA home

network AAAh), wherein intermediate AAA network nodes pass the MIPv6-related

authentication and authorization information unchanged between the mobile node and the

home AAA server *(pages 10-16, section 7; pages 19-28, section 9; information flows 1.2-*

1.9 and 2.2-2.11; the AAAv verifies the message is coming from a valid AAA Client and

then, checks the MIPv6 Feature Vector AVP, and then sends it to the MN's home AAA

server; the AAAh may exchange many messages with the MN via the AAAv (e.g. for a user

authentication mechanism that requires more than one round-trip); AAAh may also

compute other keying material according to the keys requested by the MN and send it to the

MN passing through the AAAv).

- **Regarding claim 48**, Faccin discloses the server of claim 47, further comprising

means for assigning a home address to the mobile node *(pages 26-27; section 9.5.2)*.

- **Regarding claim 49**, Faccin discloses the server of claim 48, further comprising

means for configuring the home address of the mobile node using roundtrips of a selected

Extensible Authentication Protocol (EAP) procedure *(pages 5-6, sections 4.1-4.2; page 15,*

section 7.6).

- **Regarding claim 50**, Faccin discloses the server of claim 48, further comprising means for transferring the home address of the mobile node to the home agent using an AAA framework protocol application *(page 12, section 7.3.1; page 2-21, section 9.2.1)*.

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18.   **Claims 11, 18, 34, and 41 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Faccin, as applied to claims 1 and 24 above, and further in view of Akhtar et al., (hereinafter "Akhtar"), U.S. Patent No. 7,079,499, filed on September 07, 2000.

- **Regarding claim 11**, Faccin discloses the method of claim 10.

Faccin does not explicitly disclose the EAP attributes are EAP Type-Length-Value (TLV) attributes.

However, in an analogous art, Akhtar discloses a mobility architecture framework, wherein the EAP attributes are EAP Type-Length-Value (TLV) attributes *(Akhtar: col. 88, lines 4-10)*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Akhtar with the method and system of Faccin, wherein the EAP attributes are EAP Type-Length-Value (TLV) attributes to provide a communication architecture for enabling IP-based mobile communications *(Akhtar: col. 1, lines 56-58)*.

- **Regarding claim 18**, Faccin discloses the method of claim 15.

Faccin does not disclose the AAA framework protocol application is an application of a protocol selected from the group of Diameter and RADIUS.

However, in an analogous art, Akhtar discloses a mobility architecture framework, wherein the AAA framework protocol application is an application of a protocol selected from the group of Diameter and RADIUS *(Akhtar: col. 26, lines 1-7; col. 27, lines 1-5; col. 31, lines 36-42)*.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Akhtar with the method and system of Faccin, wherein the AAA framework protocol application is an application of a

protocol selected from the group of Diameter and RADIUS to provide a communication

architecture for enabling IP-based mobile communications *(Akhtar: col. 1, lines 56-58)*.

- **Regarding claim 34**, claim 34 is similar in scope to claim 11, and is therefore rejected under similar rationale.

- **Regarding claim 41**, claim 41 is similar in scope to claim 18, and is therefore rejected under similar rationale.

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy

as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the mailing date of this final action.

20.   Any inquiry concerning this communication or earlier communications from the examiner

        should be directed to Luu Pham whose telephone number is 571-270-5002. The examiner

        can normally be reached on Monday through Friday, 7:30 AM - 5:00 PM (EST).

              If attempts to reach the examiner by telephone are unsuccessful, the examiner's

        supervisor, Emmanuel L. Moise can be reached on 571-272-3865. The fax phone number

        for the organization where this application or proceeding is assigned is 571-273-8300.

              Information regarding the status of an application may be obtained from the Patent

        Application Information Retrieval (PAIR) system. Status information for published

        applications may be obtained from either Private PAIR or Public PAIR. Status information

        for unpublished applications is available through Private PAIR only. For more information

        about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

        access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-

        217-9197 (toll-free). If you would like assistance from a USPTO Customer Service

        Representative or access to the automated information system, call 800-786-9199 (IN USA

        OR CANADA) or 571-272-1000.

        /Luu Pham/
        Examiner, Art Unit 2437

        /Emmanuel L. Moise/
        Supervisory Patent Examiner, Art Unit 2437